

Curtain wall Reynaers CW 60 – Basic
glazing: Planibel clear 6mm / 15 / Planibel clear 4mm

The single number ratings of airborne sound reduction $R_w(C,C_{tr})$

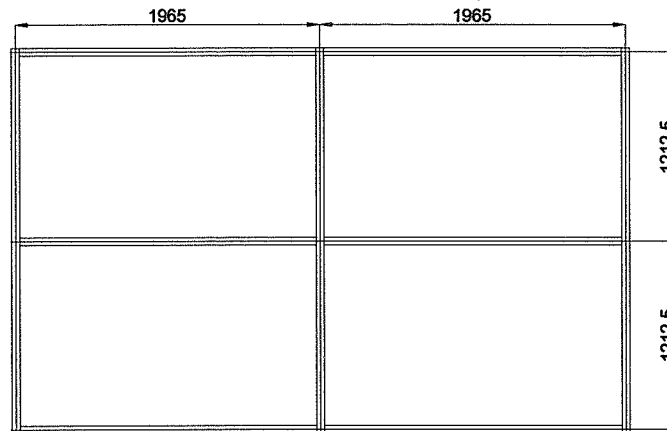
Contract no. - 01/00948/13/R48NA

Customer:

Reynaers Polska Sp. z o.o., Okulickiego Str. 12, 05-500 Piaseczno
Reynaers Aluminium NV, Oude Liersebaan 266, B-2570 Duffel, Belgium

1. Technical details of assessed construction

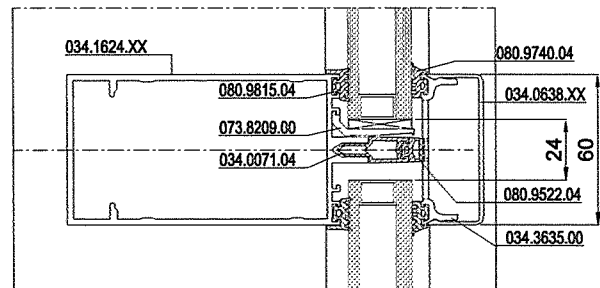
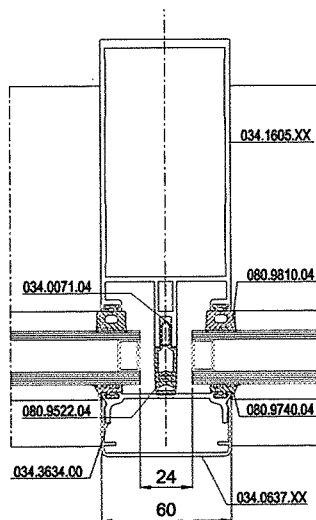
The object of assessment is a curtain wall sample with the dimensions of H = 2520 mm, S = 4000 mm, built out of 4 modules with fixed glazing with the dimensions of 1965 x 1212,5 mm.



Typical section views through mullion and transom are presented below.

Section view through mullion

Section view through transom



2. Glazing: Planibel clear 6mm / 15 / Planibel clear 4mm

The air borne sound reduction index of glazing itself is $R_w(C; C_{tr}) = 34(-1, -4)$ dB.

No.	Description	Thickness [mm]	Density ρ [kg/m ³]	Surface mass m'' [kg/m ²]
1	glass	6	2500	15
2.	air	15	0.001	-
3.	glass	4	2500	10
Calculated total thickness = 25 mm			Calculated total of the surface mass = 25 kg/m ²	

3. Basis for the estimation of the air borne sound reduction index

Air borne sound reduction index of a curtain wall built in Reynaers CW60 system – Basic has been estimated based on results of laboratory measurements of a sample of Reynaers CW50 – Classic curtain wall, carried out in Acoustical Laboratory of ITB in 2006 in accordance with PN-EN 20140-3:1999 standard, being equivalent to EN 20140-3:1995 standard.

4. The air born sound reduction index

Sample of Reynaers CW60 - Basic curtain wall, as in p. 1, with Planibel clear 6 mm / 15 / Planibel 4 mm glazing (glazing construction see p. 2) has the air borne sound reduction index of:

$$R_w(C, C_{tr}) = 34(-1, -4) \text{ dB}$$

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Warsaw, 19.08.2012